86-42

United States Department of Agriculture

National Agricultural Library

Beltsville Maryland 20705

# Quick Bibliography Series

QUINOA (CHENOPODIUM QUINOA): HIGH FIBER, HIGH PROTEIN GRAIN
1970-86

43 Citations

NAL-BIBL. QB 86-42
March 1986

Searched by:
JERRY RAFATS
National Agricultural Library
Economics and Marketing Reference Branch
(301) 344-3704

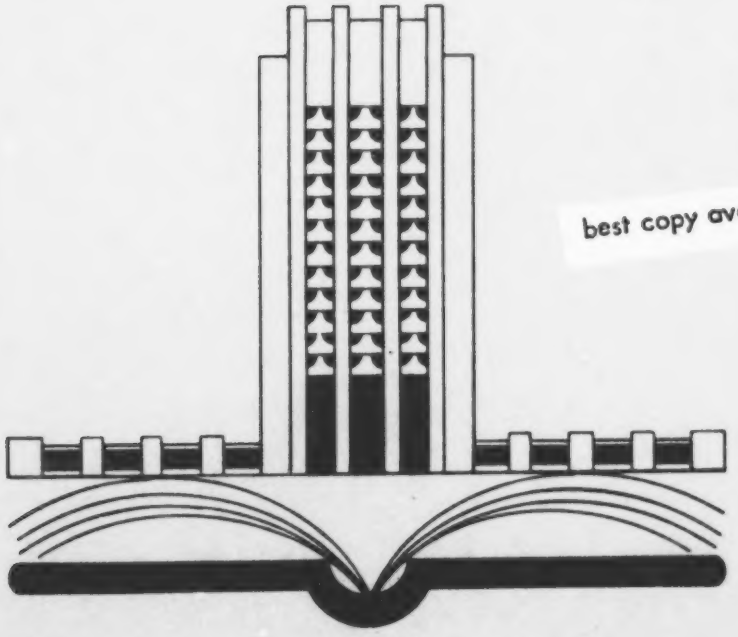
DATABASE SEARCHED: AGRICOLA

LANGUAGES: None excluded

NEWARK PUBLIC LIBRARY

APR 16 1986

U. S. GOVT. PUBS.
DEPOSITORY 376



best copy available

A 17.18/4:

Bibliographies in the Quick Bibliography Series of the National Agricultural Library, are intended primarily for current awareness, and as the title of the series implies, are not indepth exhaustive bibliographies on any given subject. However, the citations are a substantial resource for recent investigations on a given topic. They also serve the purpose of bringing the literature of agriculture to the interested user who, in many cases, could not access it by any other means. The bibliographies are derived from computerized on-line searches of the AGRICOLA data base. Timeliness of topic and evidence of extensive interest are the selection criteria.

The author/searcher determines the purpose, length, and search strategy of the Quick Bibliography. Information regarding these is available upon request from the author/searcher.

Copies of this bibliography may be made or used for distribution without prior approval. The inclusion or omission of a particular publication or citation may not be construed as endorsement or disapproval.

To request a copy of a bibliography in this series, send the title, series number and self-addressed gummed label to:

**U.S. Department of Agriculture**
**National Agricultural Library**
Public Services Division, Room 111
Beltsville, Maryland 20705

United States Department of Agriculture | National Agricultural Library | Public Services Division | Beltsville, Maryland 20705

**DOCUMENT DELIVERY SERVICES AVAILABLE to Libraries and Other Information Centers and Commercial Organizations**

The National Agricultural Library (NAL) accepts requests from libraries and other organizations in accordance with the national and international interlibrary loan code and guidelines. In its national role, NAL has a unique responsibility to attempt to supply copies of agricultural publications not found elsewhere. Filling requests for materials readily available from other sources would divert its resources and diminish its ability to serve as a national source for agricultural and agriculturally related publications. Therefore, NAL should be viewed as a library of last resort. Requestors should submit requests first to State/region/network sources prior to sending to NAL. Within the United States, possible sources are the land-grant university or other large research libraries within a state. Requesters in other countries should first try major university, national or provincial institutions. If the needed publications are not available from these sources, the requests may be submitted to NAL with a statement indicating their non-availability.

• Requests may be submitted on the American Library or the International Library interlibrary request form, by TWX (710-828-0506) or via the OCLC interlibrary loan subsystem. Our OCLC symbol is **AGL**, and we request that the symbol be entered twice. The complete name of the person authorizing the request is to appear on each form.

• The standard bibliographic source which lists the title as owned by NAL should be noted on each request. Requests for periodical articles should be verified. If verification is not possible, indicate the sources searched and give the sourceof the citation requested. Those requests which are verified or for which the citation source has been given receive a more thorough search. Unverified requests may be returned. If the citation is from an NAL database (CAIN/AGRICOLA, *Bibliography of Agriculture*, or the NAL catalog) and the call number is given, this call number should be included on the request.

**LOAN SERVICE** – Monographs published in the United States or abroad may be lent to U.S. libraries. Monographs published in the U.S. may be lent to libraries in other countries. The loan period is one month unless a shorter period is indicated on the due slip. The loan may be renewed for an additional month if there is no reserve request. The renewal request should be received prior to the due date. The borrowing library is responsible from the time of dispatch for any loss or damage incurred.

The following materials are **not** available for loan: serials (except for USDA serials), rare, reference and reserve books microforms, and proceedings of conferences or symposiums. Photocopy or microform of the non-circulating publications will be supplied automatically as described below if the requesting organization indicates that this is acceptable on the loan request form.

**PHOTODUPLICATION SERVICE** – A separate completed interlibrary form should be submitted for each article requested. Willingness to pay charges should be indicated on the form. Indicate compliance with copyright law or include a statement that the article is for research purposes only. Requests cannot be processed without these statements.

Rates are:

*Electrostatic copy, microfilm and microfiche* –
$ 5.00 for the first 10 pages or fraction copied from a single article or publication.
$ 3.00 for each additional 10 pages or fraction.

*Duplication of NAL-owned microfilm* – $ 10.00 per reel.

*Duplication of NAL-owned microfiche*– $ 5.00 for the first fiche and $ .50 for each additional fiche.

*Billing* – Fees include postage and handling, and are subject to change. Invoices are issued quarterly by the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161. Requesters are encouraged to establish deposit accounts with NTIS.
**DO NOT SEND PREPAYMENT.**

**SEND REQUESTS TO** – USDA, National Agricultural Library, Lending Branch, ILL, Beltsville, Maryland 20705. Questions concerning these services may be made by correspondence to Head, Lending Branch or by telephoning (301) 344-3755.

***NOTE*** –
• Once requests have been accepted and processing has begun, requests cannot be cancelled. The appropriate charge for filling requests will be applied.

Form NAL-8A (10/84)

READEX FICHE

United States Department of Agriculture | National Agricultural Library | Public Services Division | Beltsville, Maryland 20705

## DOCUMENT DELIVERY SERVICES TO INDIVIDUALS

The National Agricultural Library (NAL) has a unique responsibility to attempt to supply copies of agricultural publications not found elsewhere. Filling requests for materials readily available from other sources would divert its resources and diminish its ability to serve as a national source for agricultural and agriculturally related publications. Therefore, NAL should be viewed as a library of last resort and individuals should submit requests first to local or state sources prior to sending to NAL. Possible sources are the land-grant university or other large research libraries within a state. If the needed publications are not available from these sources, the requests may be submitted to NAL with a statement indicating their non-availability.

Individuals in other countries should submit requests through major university, national or provincial institutions.

**LOAN SERVICE** – Materials in the collection are loaned only to other *libraries*. Requests for loans should be made through local public, academic or special libraries.

The following materials are **not** available for loan: serials (except USDA serials); rare, reference, and reserve books; microforms; and proceedings of conferences or symposiums. Photocopy or microform of non-circulating publications may be purchased as described below.

**PHOTODUPLICATION SERVICE** – Use "USDA Request for Photocopying" (form LF-607) which may be requested in advance from our Library. A *separate form* should be submitted for each article or item requested. Requests should be as complete as possible with a minimum of abbreviation. The source of the citation should be given. If the citation is from an NAL database (CAIN/AGRICOLA, *Bibliography of Agriculture*, or the NAL catalog) and the call number is given, that call number should be listed in the proper block on the request form. Willingness to pay charges should be indicated on the form. Indicate compliance with copyright law or include a statement that the article is for research purposes only. Requests cannot be processed without these statements.

Rates are:

*Electrostatic copy, microfilm and microfiche* –
$ 5.00 for the first 10 pages or fraction copied from a single article or publication.
$ 3.00 for each additional 10 pages or fraction.

*Duplication of NAL-owned microfilm* – $ 10.00 per reel.

*Duplication of NAL-owned microfiche*– $ 5.00 for the first fiche and $ .50 for each additional fiche.

*Billing* – Fees include postage and handling, and are subject to change. Invoices are issued quarterly by the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161. Requesters are encouraged to establish deposit accounts with NTIS.
**DO NOT SEND PREPAYMENT.**

**SEND REQUESTS TO** – USDA, National Agricultural Library, Lending Branch, ILL, Beltsville, Maryland 20705. Questions concerning these services may be made by correspondence to Head, Lending Branch or by telephoning (301) 344-3755.

*NOTE* –
• Once requests have been accepted and processing has begun, requests cannot be cancelled. The appropriate charge for filling requests will be applied.

## USDA Regional Document Delivery

Through agreements with the major land-grant libraries in select states, USDA Employees or libraries in those states may send their requests for document service directly to the land-grant university library for service. If the document cannot be supplied, it will be automatically forwarded to a larger regional land-grant library and a notice of this action sent back to the requestor. If the regional library cannot fill the request, it is forwarded to the National Agricutural Library (Utilization Section) for completion. This service exists in the following states, and Form AD-245 or the CALS printout form should be sent to these libraries. Phone numbers may be used for emergency services.

**Alabama**
Ralph Brown Draughon Library
Auburn University
Auburn, AL 36830 (205)826-4500

**Arizona**
Interlibrary Loans
University of Arizona Library
Tucson, AZ 85721 (602)626-1941

**Arkansas**
Interlibrary Loan
University of Arkansas
Fayetteville, AR 72701 (501)575-4101

**California**
Interlibrary Loans
University of California Library
Davis, CA 95616 (916)752-2251

Interlibrary Loans
Bio-Ag Science Libraries
University of California
Riverside, CA 92502 (714)787-3701

**Colorado**
Interlibrary Loans
Colorado State University Library
Ft. Collins, CO 80523 (303)491-5911

**Florida**
Hume Library
University of Florida
Gainesville, FL 32601 (904)392-1934

**Georgia**
Science Library
University of Georgia
Athens, GA 30601 (404)542-1315

**Hawaii**
Interlibrary Loans
Thomas Hale Hamilton Library
2550 The Mall
University of Hawaii
Honolulu, HI 96843 (808)948-8568

**Idaho**
University of Idaho Library
Moscow, ID 83843 (208)885-6559

**Iowa**
Interlibrary Loan
Iowa State University Library
Ames, IA 50010 (515)294-3642

**Kansas**
USDA Document Delivery
Kansas State University Library
Manhattan, KS 66506 (913)532-6516

**Louisiana**
Interlibrary Loans
Louisiana State University Library
Baton Rouge, LA 70803 (504)388-2138

**Michigan**
Document Delivery
Michigan State University Library
East Lansing, MI 48824 (517)355-7644

**Minnesota**
St. Paul Campus Library
University of Minnesota
St. Paul, MN 55108 (612)373-0968

**Mississippi**
Interlibrary Loans
Mitchell Memorial Library
Mississippi State University
Box 5408
Mississippi, MS 39762 (601)325-4225

**Missouri**
University of Missouri
1C31 Science
Ellis Library
Columbia, MO 65201 (314)882-2656

FEBRUARY 1984

Montana
Roland R. Renne Library
Montana State University
Bozeman, MT 59717 (406)994-3161

Interlibrary Loan (for Forest Service (ONLY)
Mansfield Library
University of Montana
Missoula, MT 53706 (406)262-9635

Nebraska
C. Y. Thompson Library
University of Nebraska, East Campus
Lincoln, NE 68503 (402)472-2802

Nevada
Life & Health Science Library
Fleischmann Agricultural Building
University of Nevada, Reno
Reno, NV 89557 (702)784-6616

New Mexico
Interlibrary Loans
New Mexico State University Library
P. O. Box 3475
Las Cruces, NM 88003 (505)646-4737

New York
Interlibrary Loan Services
Mann Library
Cornell University
Ithaca, NY 14850 (607)256-7754

North Carolina
Interlibrary Center
D. H. Hill Library
North Carolina State University
Raleigh, NC 27607 (919)737-2116

North Dakota
North Dakota State University Library
Fargo, ND 58102 (701)237-8885

Ohio
Interlibrary Loan
Ohio State University Library
1858 Neil Avenue Mall
Columbus, OH 43210 (614)422-6211

Oklahoma
Interlibrary Loans
Oklahoma State University Library
Stillwater, OK 74074 (405)624-6313

Oregon
Interlibrary Loans
Washington State University Library
Pullman, WA 99164 (509)335-2671

Pennsylvania
Interlibrary Loan Services
Mann Library
Cornell University
Ithaca, NY 14850 (607)256-7754

Puerto Rico
University of Puerto Rico
Agricultural Experiment Station Library
P. O. Box H
Rio Piedras, PR 00928 (809)767-9705

South Carolina
Interlibrary Loans
Robert Meldrow Cooper Library
Clemson University
Clemson, SC 29631 (803)656-3025

South Dakota
H. M. Briggs Library
P. O. Box 2115
South Dakota State University
Brookings, SD 57000 (605)688-5106

Tennessee
James D. Hoskins Library
University of Tennessee
Knoxville, TN 37916 (615)974-4240

Texas
Interlibrary Loans
University Library
Texas A&M University
College Station, TX 77843 (713)845-564

Utah
Interlibrary Loans
Merrill Library
Utah State University
Logan, UT 84322 (801)750-2680

Washington
Science & Engineering Library
Washington State University
Pullman, WA 99164 (509)335-2671

Wisconsin
Steenbock Memorial Library
University of Wisconsin
550 Babcock Drive
Madison, WI 53706 (608)262-9635

AGRICOLA

File 10

Contains citations to documents published later than January 1979.

0001
**Characterization of quinoa starch (Chenopodium quinoa, cereal crop, nutritives value, protein).**
Atwell, W.A.CECHA. ; Patrick, B.M.; Johnson, L.A.; Glass, R.W. St. Paul : American Association of Cereal Chemists. Cereal chemistry. Jan/Feb 1983. v. 60 (1). p. 9-11. ill. 1 p. ref. (NAL Call No.: 59.8 C33).

0002
**Chemical and biological evaluation of quinoa (Chenopodium quinoa Willd). Effect of extracting the saponins by heat treatment (Nutritive value, aminoacids, chemical composition, proteins). Evaluacion quimica y biologica de la quinoa (Chenopodium quinoa Willd). Influencia de la extraccion de las saponinas por tratamiento termico. SPANISH.**
Telleria Rios, M.L. ; Sgarbieri, V.C. Guatemala, Sociedad Latinoamericana de Nutricion. Archivos latinoamericanos de nutricion. Sept 1978. v. 28 (3). p. 253-263. ill. 10 ref. (NAL Call No.: 389.8 AR22).

0003
**Effect of date of planting, distance between rows and ecotypes on yield and behaviour of quinoa (Chenopodium quinoa Willd) in Chillan (Chile). Efecto de la fecha de siembra, distancia entre surcos y ecotipos sobre el rendimiento y comportamiento de quinoa (Chenopodium quinoa Willd) en Chillan. Spanish.**
Etchevers B, J. ; Avila T, P. Santiago, Universidad Catolica de Chile, Escuela de Agronomia. Ciencia e investigacion agraria. Jan/Apr 1981. v. 8 (1). p. 19-26. Includes 18 ref. (NAL Call No.: S15.C52).

0004
**Effect of seed bed preparation, and seed and harvesting methods on yield, in quinoa (Chenopodium quinoa Willd) (Chile). Efecto de sistemas de preparacion de suelo, siembra y cosecha sobre los rendimientos de quinoa (Chenopodium quinoa Willd). Spanish.**
Valiente G., R. ; Etchevers B., J.; Hetz H., E. Santiago, Instituto de Investigaciones Agropecuarias. Agricultura tecnica. July/Sept 1981. v. 41 (3). p. 121-126. Includes 13 ref. (NAL Call No.: 464.9 C432B).

0005
**Fertilization of the quinua (Chenopodium quinoa) crop in conditions of the Puno highlands, Peru. Fertilizacion del cultivo de quinua en condiciones del Altiplano de Puno, Peru. SPANISH.**
Barboza B. J. ; Blasco Lamenca, M.; Calderon Perez, G. San Jose, Costa Rica, Instituto Interamericano de Ciencias Agricolas. Turrialba. Apr/June 1980. v. 30 (2). p. 226-228. 3 ref. (NAL Call No.: 8 T86).

0006
**New forage crops for wet-fractionation to produce leaf protein concentrates (Atriplex hortensis, Chenopodium quinoa and Urtica dioica).**
Carlsson, R. ; Hanczakowski, P.; Israelsen, M. Warszawa : Panstwowe Wydawn. Rolnicze i Lesne. Roczniki naukowe zootechniki = Polish journal of animal science and technology. 1982. v. 9 (1). p. 263-270. Includes references. (NAL Call No.: SF1.R6).

0007
**Organization of quinoa storage in Puno. Organizacion de centros de acopio de quinua en Puno / Jorge Reinoso R., Julio Ramos, Hugo Torres. SPANISH.**
Reinoso R., Jorge. Lima Instituto Interamericano de Ciencias Agricolas, Oficina en Peru 1979. ii, 56 leaves : ill., maps. -. Bibliography: leaf 56. (NAL Call No.: 28 In83P No.217).

0008
**Quinoa. La quinua. SPANISH.**
Tapia Vargas, Gualberto. La Paz Academia Nacional de Ciencias 1976. 63 p., (2) leaves of plates ; col. ill. ; 22 cm. Bibliography: p. 51-52. (NAL Call No.: SB317.Q5T3).

0009
**Quinoa (Chenopodium quinoa) in Colombia (Preparation of beverages and bread). La quinua o suba en Colombia. 4. SPANISH.**
Pulgar Vidal, J. Quito, Ecuador, (s.n.). El Agro. June/July 1978. v. 23 (3). p. 20-22. ill. (NAL Call No.: 9.5 AG84).

0010
**Seed rot and damping-off of Chenopodium quinoa caused by Sclerotium rolfsii.**
Beckman, P.M. ; Finch, H.C. St. Paul, Minn., American Phytopathological Society. Plant disease. May 1980. v. 64 (5). p. 497-498. ill. 3 ref. (NAL Call No.: 1.9 P69P).

0011
**Times for seeding and weeding in the cultivation of quinua (Chenopodium quinoa) in the highlands of Puno, Peru. Epocas de siembra y deshierbo para el cultivo de la quinua en condiciones del Altiplano de Puno, Peru. SPANISH.**
Calderon Perez, G. ; Blasco Lamenca, M.; Barboza B, J. San Jose, Costa Rica, Instituto Interamericano de Ciencias Agricolas. Turrialba. Apr/June 1980. v. 30 (2). p. 220-223. ill. 5 ref. (NAL Call No.: 8 T86).

Atwell, W.A. 1
Avila T, P. 3
Barboza B, J. 5, 11
Beckman, P.M. 10
Blasco Lamenca, M. 5, 11
Calderon Perez, G. 5, 11
Carlsson, R. 6
CECHA. 1
Etchevers B., J. 4
Etchevers B, J. 3
Finch, H.C. 10
Glass, R.W. 1
Hanczakowski, P. 6
Hetz H., E. 4
Israelsen, M. 6
Johnson, L.A. 1
Patrick, B.M. 1
Pulgar Vidal, J. 9
Reinoso R., Jorge. 7
Sgarbieri, V.C. 2
Tapia Vargas, Gualberto. 8
Telleria Rios, M.L. 2
Valiente G., R. 4

AGRICOLA

FILE 110

Contains citations to documents added to the Library's collections from 1970 through 1978.

0001
**Semilleros basicos y de fundacion; Chenopodium quinoa seedbeds. SPA.**
Rosas Cisneros, E; Calderon Perez, G. Publ Misc Interam Inst Agric Sci. 1977. Vol. 170: pp. 83-89. (NAL Call No.: 28 IN83P).

0002
**Enfermedades de la quinua; Chenopodium quinoa diseases caused by bacteria, nematodes and viruses . SPA.**
Salas, B; Otazu, V; Vilca, A. Publ Misc Interam Inst Agric Sci. 1977. Vol. 170: pp. 143-149. Ref. (NAL Call No.: 28 IN83P).

0003
**The availability of iron in Chenopodium quinoa Rats .**
Allred, L; Mahoney, A W; Hendricks, D G. Nutr Rep Int. Nov 1976. Vol. 14 (5): pp. 575-579. (NAL Call No.: RC620.A1N8).

0004
**The breeding system of Chenopodium quinoa. I. Male sterility.**
Simmonds, N W. Heredity. Aug 1971. Vol. 27 (1): pp. 73-82 (NAL Call No.: 443.8 H42).

0005
**Climatologia del cultivo de la quinua; Climatology of Chenopodium quinoa growing Peru . SPA.**
Aquize Jaen, E. Publ Misc Interam Inst Agric Sci. 1977. Vol. 170: pp. 119-127. (NAL Call No.: 28 IN83P).

0006
**Dietary habits of the peasant of the Bolivian highlands.**
Esquef, L D. FAO Nutr Newslett. Apr/June 1972. FNC. Vol. 10 (2): pp. 16-20 (NAL Call No.: TX341.F6 F&N).

0007
**Ecofisiologia de la quinua; Ecophysiology of Chenopodium quinoa Peru . SPA.**
Arze Borda, J; Reyes, P; Ramierez, D; Ramos, J L; Molina, F. Publ Misc Interam Inst Agric Sci. 1977. Vol. 170: pp. 75-80. (NAL Call No.: 28 IN83P).

0008
**Electron microscopy of artichoke mottled crinkle virus in leaves of Chemopodium quinoa Willd.**
Martelli, G P; Russo, M. J Ultrastruct Res. Jan 1973. Vol. 42 (1/2): pp. 93-107. Ref. (NAL Call No.: 440.8 J822).

0009
**Establecimiento de semilleros oficializados de quinua; Establishment of authorized seedbeds of chenopodium quinoa Peru . SPA.**
Rea, J; Mujica, A; Zevallos, J; Narrea, A. Publ Misc Interam Inst Agric Sci. 1977. Vol. 170: pp. 90-100. Ref. (NAL Call No.: 28 IN83P).

0010
**Valutazione del valore foraggero di Chenopodium quinoa L; Evaluation analysis of the forage value of Chenopodium quinoa L. ITA.**
Ariotti Marchisio, P; Boccignone, M; Campos Merino, J; Maletto, S; Mussa, P P; Salazar Luna, F; Sarra, C. Ann Fac Med Vet Torino. 1974. Vol. 21: pp. 133-140. Eng. sum. (NAL Call No.: 41.9 T843).

0011
**An evaluation of the protein quality of quinoa Chenopodiumquinoa, composition .**
Mahoney, A W; Lopez, J G; Hendricks, D G. J Agric Food Chem. Mar/Apr 1975. Vol. 23 (2): pp. 190-193. Ref. (NAL Call No.: 381 J8223).

0012
**Fertilizantes; Fertilizers for Chenopodium quinoa crops . SPA.**
Narrea R, A. Publ Misc Interam Inst Agric Sci. 1977. Vol. 170: pp. 58-59. (NAL Call No.: 28 IN83P).

0013
**Food proteins from unconventional cereals.**
Inglett, G E. Food Technol. May 1977. FNC. Vol. 31(5): pp. 180-181 (NAL Call No.: 389.8 F7398).

0014
**Food proteins from unconventional cereals.**
Inglett, G E. Food Technol. May 1977. FNC. Vol. 31(5): pp. 180-181 (NAL Call No.: 389.8 F7398).

0015
**The Inca's ancient answer to food shortage Chenopodium quinoa, field crop .**
Weber, E J. Nature. Apr 6, 1978. Vol. 272 (5653): pp. 486. (NAL Call No.: 472 N21).

0016
**Industrializacion de la quinua; Industrialization of quinoa Cooking, processing, saponin coent . SPA.**
Tapia, M E. Publ Misc Interam Inst Agric Sci. 1977. Vol. 170: pp. 172-175. (NAL Call No.: 28 IN83P).

0017
**Untersuchungen zur Wirkung von Olen bei der Virusubertragung durch Blattlause. 1. Wirkung von Olen auf mechanischeVirusubertragungen; Investigations on the effect of oils on virus transmission by aphids. 1. Effect of oils on mechanical virus transmissions. Chenopodium quinoa, cucumber mosaic virus . GER.**
Hein, A. Phytopathol Z. June 1972. Vol. 74 (2): pp. 126-130. (NAL Call No.: 464.8 P562).

0018
**Clave para la identificacion de deficiencias minirales en la quinua; Key for mineral deficiency identification in Chenopodium quinoa. SPA.**
Zvietcovich M, G; Angles M, J. Publ Misc Interam Inst Agric Sci. 1977. Vol. 170:

pp. 81-82. (NAL Call No.: 28 IN83P).

0019
**Mecanizacion en la siembra de quinua; Mechanization in the sowing of Chenopodium quinoa. SPA.**
Mujica S, A; Narrea R, A. Publ Misc Interam Inst Agric Sci. 1977. Vol. 170: pp. 111-118. (NAL Call No.: 28 IN83P).

0020
**Metodos de mejoramiento; Methods of genetic inprovement of Chenopodium quinoa . SPA.**
Lescano Rivero, J L. Publ Misc Interam Inst Agric Sci. 1977. Vol. 170: pp. 63-65. 2 diagrams (NAL Call No.: 28 IN83P).

0021
**Plagas de la quinua en Puno; Pests of Chenopodium quinoa in Puno Peru . SPA.**
Zanabria H, E; Mujica S, A. Publ Misc Interam Inst Agric Sci. 1977. Vol. 170: pp. 129-142. 3 plates. (NAL Call No.: 28 IN83P).

0022
**Estudio de pre-inversion sobre el fomento de la produccion agroindustrial de quinua en el Departamento de Puno; Pre-investment study of the promotion of agroindustrial quinoa production in the department of Puno Programs, economic aspects, cultivation, Peru . FRE.**
Publ Misc Interam Inst Agric Sci. Sept 1977. Vol. 171, 85 p.: (NAL Call No.: 28 IN83P).

0023
**Costos de produccion; Production costs Chenopodium quinoa, Peru . SPA.**
Mujica S, A; Narrea R, A. Publ Misc Interam Inst Agric Sci. 1977. Vol. 170: pp. 150-160. (NAL Call No.: 28 IN83P).

0024
**Cultivo de la quinua; Quina Chenopodium quinoa Willd. growing. SPA.**
Lescano Rivero, Jose L. Lima . 1971. Bibliography: p. 15. Vol. 16 p. illus.: (NAL Call No.: S15.P47 No.17).

0025
**Quinoa and relatives Chenopodium spp. (Chenopodiaceae) Food crops .**
Simmonds, N W. In Evolution of Crop Plants. N. W. Simmonds, ed. 1976. Vol. p. 29-30. Map. Ref.: (NAL Call No.: SB71.E88).

0026
**Ricerche sulla composizione chimico-bromatologica del chenopodium quinoa Willd; Research on the chemical-bromatological composition of Chenopodium quinoa Willd Nutritive value as a forage . ITA.**
Ariotti, P; Mussa, P P; Sarra, C; Campos Merino, J; Salazar Luna, F. Ann Turin Univ Fac Med Vet. 1976. Vol. 23: pp. 165-189. Ref. Eng. sum. (NAL Call No.: 41.9 T843).

0027
**Resistencia en quinua (Chenopodium quinoa) al mildiu (Peronospora effusa); Resistance of quinua (Chenopodium quinoa) to downy mildew (Peronospora effusa). SPA.**
Otazu, V; Aguilar, P C; Canahua, A. Fitopatologia. Nov 1976. Vol. 11 (2): pp. 47-49. Eng. sum. (NAL Call No.: SB599.F5).

0028
**Improtancia de la "quinoa" (Chenopodium quinoa Willd.) en la solucion del problema de las proteinas en la alimentacion chilena; The significance of Chenopodium quinoa Willd. in the solution of protein problem in Chilean nutrition. SPA.**
Fuentes P, E J. Simiente. 1972. Vol. 42 (1/3): pp. 15-20. Ref. (NAL Call No.: 9.3 SI4).

0029
**Algunos criterios antropologicos acerca del marco teorico en los estudios sobre comercializacion de quinua en el Departament o de Puno; Some anthropological criteria on the theoretical model in studies of the commercialization of Chenopodium quinoa in the department of Puno Peru . SPA.**
Egoavil A, M. Publ Misc Interam Inst Agric Sci. 1977. Vol. 170: pp. 161-171. Ref. (NAL Call No.: 28 IN83P).

0030
**Taxonomy and origins of Chenopodium quinoa and Chenopodium nuttalliae.**
Nelson, D C. Diss Abstr Sect B. Mar 1969. Vol. 29(9): pp. 3224B-3225B. (NAL Call No.: Z5055.U49D53).

0031
**Tecnologia de cultivo de la quinua; Technology of Chenopodium quinoa growing. SPA.**
Mujica Sanchez, A. Publ Misc Interam Inst Agric Sci. 1977. Vol. 170: pp. 101-110. (NAL Call No.: 28 IN83P).

0032
**Utilizacion de motopulverizadoras en el cultivo de la quinua; Use of power sprayers in Chenopodium quinoa growing for pest and disease control . SPA.**
Mujica S, A. Publ Misc Interam Inst Agric Sci. 1977. Vol. 170: pp. 189-192. (NAL Call No.: 28 IN83P).

Aguilar, P C. 27
Allred, L. 3
Angles M, J. 18
Aquize Jaen, E. 5
Ariotti Marchisio, P. 10
Ariotti, P. 26
Arze Borda, J. 7
Boccignone, M. 10
Calderon Perez, G. 1
Campos Merino, J. 10, 26
Canahua, A. 27
Egoavil A, M. 29
Esquef, L D. 6
Fuentes P, E J. 28
Hein, A. 17
Hendricks, D G. 3, 11
Inglett, G E. 13, 14
Lescano Rivero, J L. 20
Lescano Rivero, Jose L. 24
Lopez, J G. 11
Mahoney, A W. 3, 11
Maletto, S. 10
Martelli, G P. 8
Molina, F. 7
Mujica S, A. 19, 21, 23, 32
Mujica Sanchez, A. 31
Mujica, A. 9
Mussa, P P. 10, 26
Narrea R, A. 12, 19, 23
Narrea, A. 9
Nelson, D C. 30
Otazu, V. 2, 27
Ramierez, D. 7
Ramos, J L. 7
Rea, J. 9
Reyes, P. 7
Rosas Cisneros, E. 1
Russo, M. 8
Salas, B. 2
Salazar Luna, F. 10, 26
Sarra, C. 10, 26
Simmonds, N W. 4, 25
Tapia, M E. 16
Vilca, A. 2
Weber, E J. 15
Zanabria H, E. 21
Zevallos, J. 9
Zvietcovich M, G. 18

**U.S. Department of Agriculture**
National Agricultural Library
Beltsville, Maryland 20705

OFFICIAL BUSINESS
Penalty for Private Use, $300

Postage and Fees Paid
United States
Department of Agriculture
AGR-101